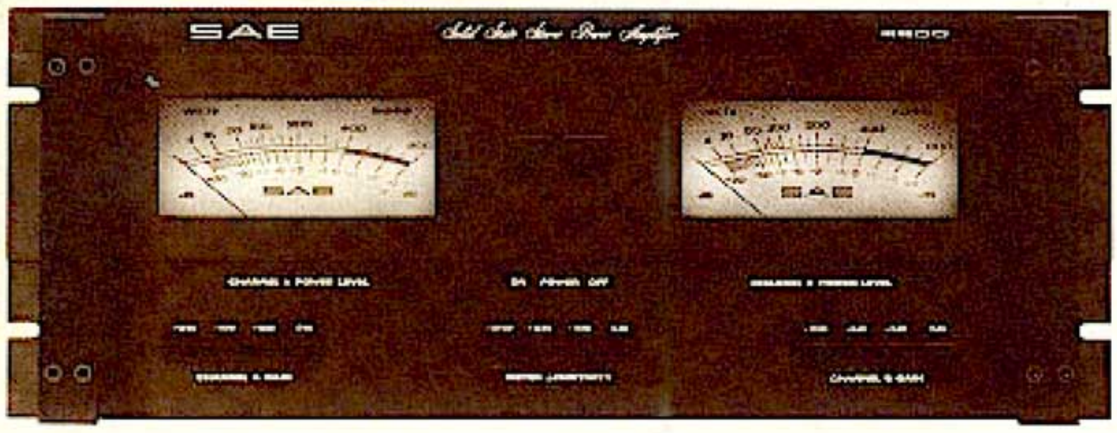
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SAE

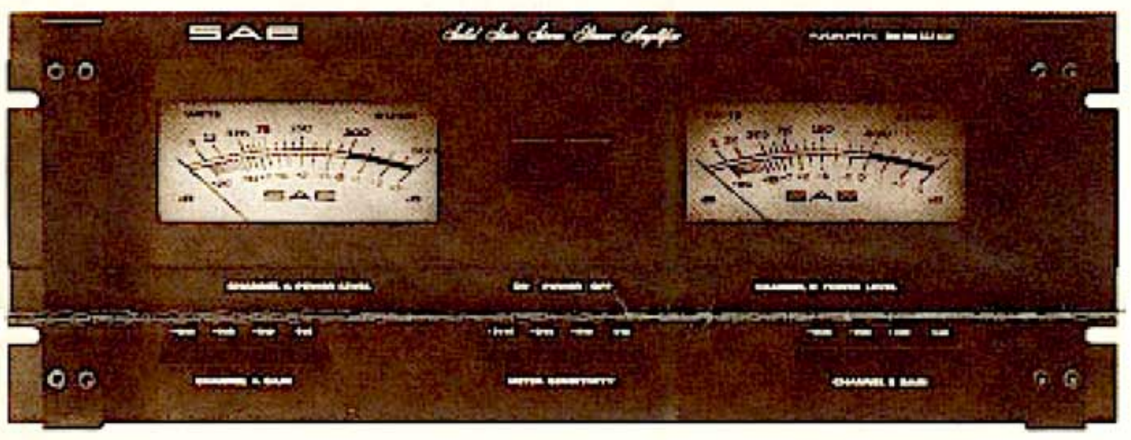
Scientific Audio Electronics, Inc.

Full Line Brochure



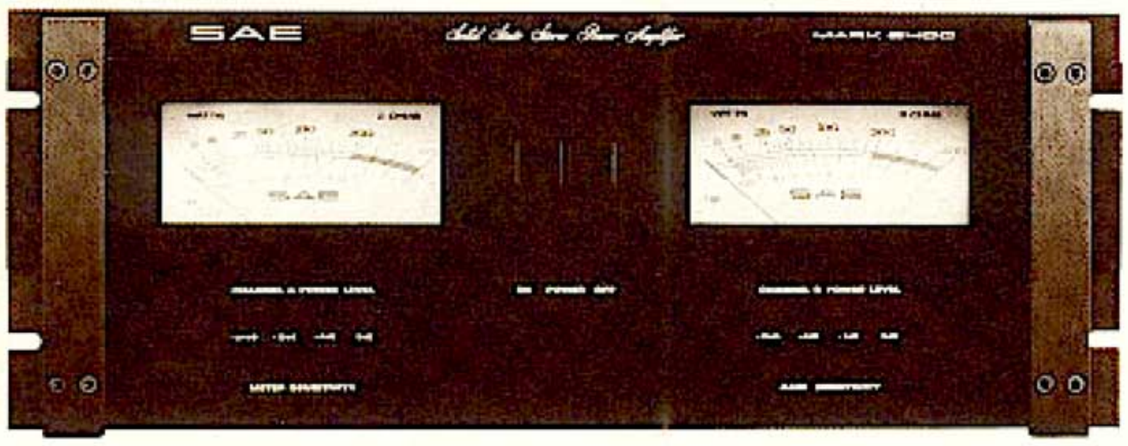
2600

Our most powerful amplifier, the 2600 is designed for sound reinforcement applications and high power home environments. Clean, dynamic reproduction is assured with our high slew rate (40V/microsec.) and low distortion. Whenever you need flawless reproduction at the highest power levels, consider the SAE 2600 your ultimate answer.



2500

Combining performance and reliability, the 2500 offers clarity and definition with great reserves of power. Our unique fully-complimentary drive and PSO output circuitry, (which maintains balanced signal drive from input to output), results in clean, clear, effortless reproduction of complex waveforms.



2400

Workhorse of our line, the 2400 offers power and performance in a surprizingly compact package. Incorporating fully-complimentary circuitry, and series output design, the amplifier will reproduce the most demanding program material without strain. Monitoring power output are two 5½" meters which show signal output from 10mW to full rated power, plus overload.



2200

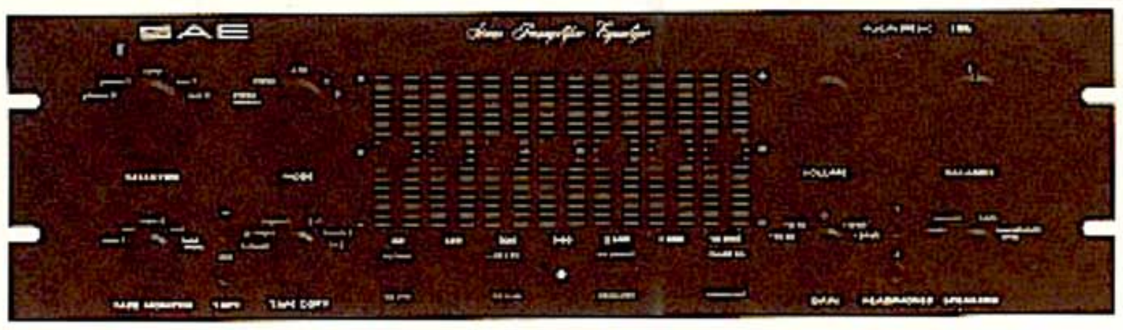
Incorporating our advanced circuitry and fabrication technology, the 2200 offers you high levels of clarity and definition at a popular power level. The latest digital-analog technology is used to display power output. Two 15 LED-arrays display output from 20mW to full rated power.



MARK XXXIB

In design and sound the XXXIB is genuine SAE, from the fully-complimentary circuitry to the high slew rate. If your needs call for state-of-the-art sound at modest power levels and/or you have strict space limitations, then the XXXIB is the perfect answer.

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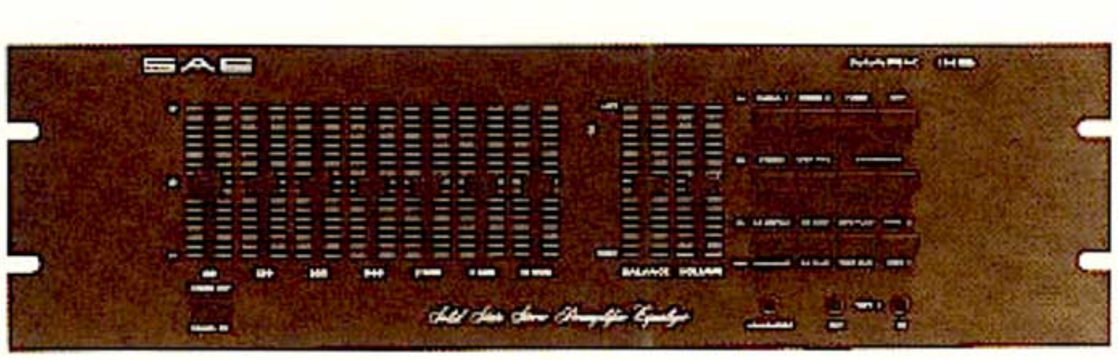
MARK IB

Quiet and versatile sums up the IB's performance. This superb preamp features a unique three-way tape monitor/copy mode and a precise stepped volume control coupled with a five-position range switch. Combine this with a 7 band graphic equalizer and the resultant flexibility of source selection, sound control, and output, puts the IB in a class by itself.



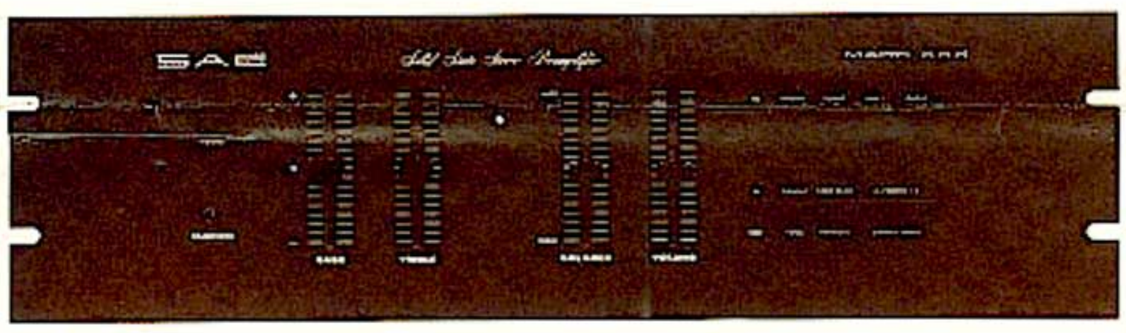
MARK IM

Offering the performance and input/output flexibility of the IB, the IM is designed to be used with an external equalizer (such as our 2700B) or for those who prefer no tone controls at all. Incorporating two studio-standard VU-meters, the IM is right at home in the center of taping sessions or critical listening.



MARK IXB

Here is the answer for a full control, high performance preamp at a moderate price. The 7-band graphic equalizer offers you total control of any program source, while being able to compensate for speaker and room problems. The equalizer, as well as volume and balance controls, uses professional slide "pots" while operational modes and functions are controlled by precision interlocking pushbuttons.



MARK XXX

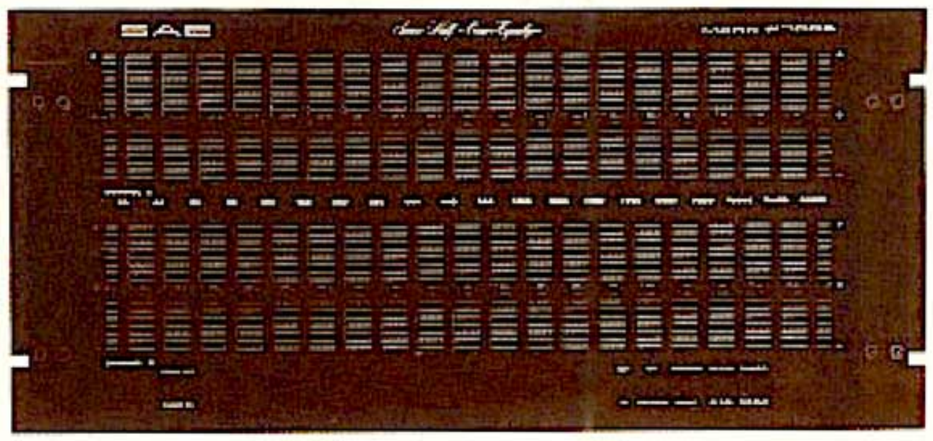
The Mark XXX preamplifier is a no-nonsense high performance unit in spite of its low price. The XXX features the same innovative circuit design, careful construction and quality parts as other SAE preamplifiers. All the basic modes are retained, however some of the more exotic features of the IB, IM and IXB have been simplified.



SAE SPEAKERS

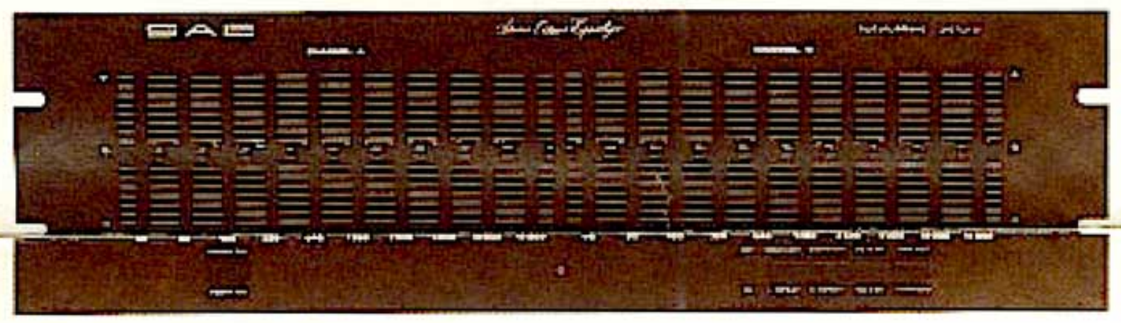
Incorporating the finest in electrostatic and dynamic principle, the SAE speaker group offers linear response with wide dispersion and low distortion. To insure optimum performance in your listening room, we have developed the speaker cross-overs with a maximum in flexibility. You have access to high and mid frequency output levels plus a low frequency turnover control all of which allows you to insure proper interface between your speakers and your listening room. These features plus the inherent quality of the speaker will result in many hours of good listening.

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2700 B

Offering unprecedented control, the 2700B is capable of program alteration over a ±8dB or ±16dB range at any or all of twenty different frequency bands with individual controls for each channel. The result is total control of room, speakers and program response problems.



MARK XVII

Program control without distortion — this is the MARK XVII. Utilizing circuitry from the 2700B, (toroid inductors, long-throw, oil-damped slide pots, etc.) the XVII offers a similar level of program quality. With 10 equalizer controls per channel, EQ defeat and tape monitor capability the MARK XVII is another great SAE value.

MARK VIB

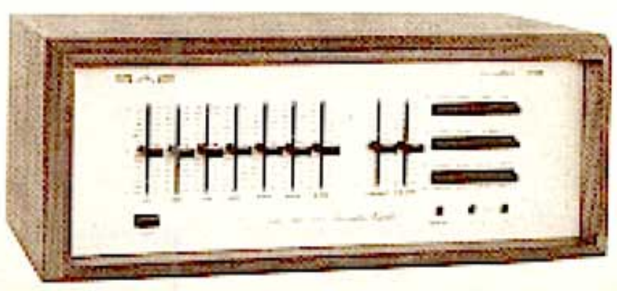
Quiet, clean reception is the hallmark of the MARK VIB tuner. A fourteen pole Butterworth type filter with an eight-stage limiter assures low distortion and excellent separation. Exact station frequency is displayed by a Nixie digital read-out system and a built-in three inch oscilloscope monitors audio signal performance.



MARK VIII

The MARK VIII FM tuner is a price optimized brother of the MARK VIB. The LED readout accurately displays station frequency as you tune. A dual meter system assures both maximum signal strength and center-of-channel tuning. The monolithic, linear-phase filter design plus phase-lock-loop multiplex give clean reception with excellent stereo separation.





SAE GOLD

Many of the products shown on these pages in mil spec black are also available in our traditional champagne gold and black format. This appearance will properly compliment certain home environments and also match predecessors to the present line which were offered in this format.

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AMPLIFIERS	2600	2500	2400	2200	MkXXXIb
Watts RMS (min.) Continuous Power Output/Channel, 20 Hz to 20kHz (both channels driven) into 8 ohms	400	300	200	100	50
Total Harmonic Distortion (THD), 20Hz to 20kHz from 250mW to rated power at 8 Ohms	0.05%	0.05%	0.05%	0.05%	0.10%
Intermodulation Distortion (IM) from 250mW to rated power at 8 Ohms with any 2 mixed frequencies between 20Hz and 20kHz at a 4/1 Voltage ratio	0.05%	0.05%	0.05%	0.05%	0.05%
Frequency Response at rated power	±0.25dB, 20Hz to 20kHz				
Noise (ref. rated power)	100dB	100dB	100dB	100dB	90dB
Slew Rate	40 Volts per microsecond				
Damping Factor	150 min. (100Hz)				
Input Sensitivity	2.12V	1.84V	1.50V	1.50V	1.00V
PROTECTION					
relay	x	x	x	x	
thermal	x	x	x	x	x
low-impedance	x	x	x	x	x
fused B supplies	x	x			

PRE-AMPLIFIERS	Mk IB	Mk IM	Mk IXB	Mk XXX
Total Harmonic Distortion (THD) at any level to rated output from 20Hz to 20kHz	0.02%	0.02%	0.02%	0.03%
Intermodulation Distortion (IM) at rated output with any 2 mixed frequencies between 20Hz & 20kHz at a 4/1 Voltage ratio	0.02%	0.02%	0.02%	0.03%
S/N (phono)	80dB	80dB	78dB	72dB
S/N (tun., tape, aux.)	100dB	100dB	95dB	90dB
Rated Output	2.5 Volts RMS			
Maximum Output (10kOhm load)	14 V	14 V	10 V	9 V
Input Impedance (phono) (aux., tun., tape)	47kOhms 100kOhms			
Frequency Response (phono) (aux., tun., tape)	±0.5dB ±0.25dB	±0.5dB ±0.25dB	±1dB ±0.25dB	±1dB ±0.25dB
Recommended Load (min.)	10kOhms			

EQUALIZERS	2700B	Mk XVII
Total Harmonic Distortion (THD) at any level to rated output from 20Hz to 20kHz	0.02% max.	0.03% max.
Intermodulation Distortion (IM) at rated output with any 2 mixed frequencies between 20Hz & 20kHz at a 4/1 Voltage ratio	0.02% max.	0.03% max.
noise (ref. to rated output)	100dB	90dB
Frequency Response (20Hz to 20kHz)	±0.25dB	±0.25dB
Bandwidth	3dB down at 6Hz & 80kHz	
Insertion Loss	less than 1dB with controls centered	
Rated Output	2.5 Volts RMS	
Output at Clipping (10kOhm load)	11V RMS	10V RMS
Input Impedance	50kOhms	
Output Load Impedance (min.)	600 Ohms	10kOhms

TUNERS	Mk VIb	Mk VIII
Sensitivity (-30dB noise & THD below 100% FM)	1.6uV	1.6uV
Total Harmonic Distortion (1kHz)	0.15%-stereo 0.10%-mono	0.20%-stereo 0.15%-mono
Noise (ref. 100% mod.)	75dB	70dB
Capture Ratio	1.5dB	1.5dB
AM Suppression	100dB min.	100dB min.
Spurious-Response Rejection	100dB min.	100dB min.
Image Rejection	100dB min.	100dB min.
Alternate-Channel Selectivity	140dB min.	120dB min.
Stereo Separation (1kHz) (10kHz)	50dB 38dB	45dB 35dB
Frequency Response	±0.5dB, 20Hz to 15kHz	
Rated Output Voltage & Impedance	1.2V RMS @ 1500 Ohms	

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SAE STORY

Scientific Audio Electronics (SAE) has been totally committed to the design and manufacture of the state-of-the-art audio components for over 10 years. Since SAE's inception, we have realized that superior performance requires MORE than just good design. A specialized facility with all services at hand for complete control of production and quality are the basis of any successful manufacturing organization. To achieve this goal we built our 36,000 sq. ft. main production facility and a 15,000 sq. ft. metal fabrication plant. Most of the critical components and all of the products are manufactured, assembled, and tested here. This dedication to detail and control over the total design and production cycle has established SAE products world-wide as the finest audio equipment available. Here is an insight into some of SAE's commitment to quality and performance:

MATERIALS

Only the highest grade components are used throughout SAE products. Mil Spec G-10 glass epoxy circuit boards ensure long term reliability, even under the most demanding conditions. Low noise and low distortion carbon and metal film resistors are found in every circuit, not just in a few critical locations. Only toroid inductors are used in all of our graphic equalizers, to ensure wide dynamic range and low noise. To maintain our standard of performance, these toroids are made at our factory. Critical transistors as well as other parts (resistors, capacitors, etc.) are hand-selected to realize the lowest distortion and noise; all of this to make sure that your product will deliver all of the performance we designed into it.

FABRICATION

A critical component of any product is the chassis which supports and shields the electronics. It must be durable and precision-built to provide support and protection under any conditions. To accomplish this in our products, we have our own metal fabrication facility using the latest in computer and manually controlled metal processing equipment. All chassis parts are produced with-in a tolerance of 5 one-thousands of an inch! All aluminum parts are Mil Spec anodized to withstand many years of use. All front panels are hand brushed for proper appearance and to epitomize the attention to detail. All circuit boards are etched and screened in-house. We relinquish to no one the responsibility for the quality of our product.

DESIGN

Our R&D Department is continually developing circuitry that establishes SAE as a leader in sound design. The fully-complimentary circuitry which maintains low dynamic and steady-state distortion, is an SAE innovation and has resulted in a class of amplifiers superior to anything else on the market.

PRODUCT INTEGRITY

With our philosophy of total control over the product from inception, through design, to the final product, we have been able to establish a new and higher level of quality and performance in the industry. Because of this belief in our product, we offer an unprecedented FREE Transferable Service Contract which is valid for 5 Years, no matter who owns the product, making it the most comprehensive and far reaching protection offered by an audio manufacturer. This is typical of the way we do everything. When you look at any piece of SAE, notice the attention to detail, the quality of components and MOST importantly the quality of sound. Then you will understand why we build Components for the Connoisseur.

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